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EXAMINER	
LEE, PATRICK J	

ART UNIT	PAPER NUMBER
2878	

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/725,494	MOULI, CHANDRA	
	Examiner	Art Unit	
	Patrick J. Lee	2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-93* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-93* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 August 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *08032006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This action is in response to amendment filed September 14, 2006.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-93 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,547,074 to Hinoda et al in view of US 6,285,020 B1 to Kim et al.

With respect to claim 1, Hinoda et al disclose a color sensing device comprising: substrate (1) as a semiconductor substrate (see column 3, lines 2-4); photodiodes (11, 12) as a photoconversion device formed within the substrate (1); dielectric layer (35) formed over photoconversion device (11, 12); and interference filters (31-34) comprising metal films (36-37) as a mesh optical filter positioned over the photoconversion device for passing light of a specific wavelength to photoconversion device (11, 12). Hinoda et al disclose the thicknesses of metal films (36-37) as controlling the transmission of a specific wavelength (see column 4, lines 26-38). Applicant argues in the response that use of colored filters (42-44) distinguishes Hinoda et al from the mesh optical filter claimed. However, the claim does not expressly exclude any use of colored filters, so it will be interpreted that applicant is basing the distinction from the device of Hinoda et al on the fact that Hinoda et al passes a range of wavelengths and not a specific singular

wavelength. In that sense, Kim et al disclose such through the use of an optical transmission apparatus comprising a metal film (10, 104, 120) with apertures (12, 106, 124) for passing a particular wavelength of interest (see column 3, lines 17-30). Such would comprise the mesh optical filter positioned over the device for passing a specific wavelength of light. It would be obvious to one of ordinary skill in the art to modify the teachings of Hinoda et al with those of Kim et al because such would improve the filtering ability of the device of Hinoda et al while lowering the number of components, allowing for ease of manufacture and lower cost of production.

With respect to claim 2, the modified Hinoda et al disclose the use of apertures (12, 106, 124).

With respect to claims 3-4, the modified Hinoda et al does not explicitly state the use of a CMOS or CCD image sensor, but such would have been obvious to one of ordinary skill in the art because of the ability to capture images accurately while providing for low manufacturing cost.

With respect to claim 5, the modified Hinoda et al discloses the vacuum evaporation as a method for depositing the metal layer.

With respect to claims 6-7, the metal layers are not disclosed to have the thicknesses claimed, but such would have been obvious to one of ordinary skill in the art in order to give the metal layers the transmissivity possible to allow a certain wavelength to pass through.

With respect to claim 8, the modified Hinoda et al discloses the use of silver or aluminum for the metal films (see column 3, lines 26-27).

With respect to claim 9, the modified Hinoda et al illustrate apertures (12, 106, 124) to be circular.

With respect to claims 10-11 & 13-16, the modified Hinoda et al does not explicitly disclose the apertures as such shape and size, but such would have been obvious to one of ordinary skill in the art because such would allow for a specific transmissivity of light.

With respect to claim 12, the modified Hinoda et al discloses the transmission of peak wavelengths in the visible spectrum (see column 4, lines 31-36).

With respect to claims 17-19, the modified Hinoda et al does not explicitly disclose the passing of non-visible light, infrared light, or near-infrared light, but such would have been obvious to one of ordinary skill in the art because one of ordinary skill in the art would be able to adjust the thicknesses of the films and dielectric layers in order to adjust the peak wavelength transmitted.

With respect to claim 20, the modified Hinoda et al disclose the filter made of silver or aluminum (see column 3, lines 26-27).

With respect to claim 21, Hinoda et al disclose a color sensing device comprising: substrate (1) as a semiconductor substrate (see column 3, lines 2-4); photodiodes (11, 12) as a photoconversion device formed within the substrate (1); dielectric layer (35) formed over photoconversion device (11, 12); and interference filters (31-34) comprising metal films (36-37) as a mesh optical filter positioned over the photoconversion device for passing light of a specific wavelength to photoconversion device (11, 12). Hinoda et al disclose the thicknesses of metal films (36-37) as

controlling the transmission of a specific wavelength (see column 4, lines 26-38). Applicant argues in the response that use of colored filters (42-44) distinguishes Hinoda et al from the mesh optical filter claimed. However, the claim does not expressly exclude any use of colored filters, so it will be interpreted that applicant is basing the distinction from the device of Hinoda et al on the fact that Hinoda et al passes a range of wavelengths and not a specific singular wavelength. In that sense, Kim et al disclose such through the use of an optical transmission apparatus comprising a metal film (10, 104, 120) with apertures (12, 106, 124) for passing a particular wavelength of interest (see column 3, lines 17-30). Such would comprise the mesh optical filter positioned over the device for passing a specific wavelength of light. It would be obvious to one of ordinary skill in the art to modify the teachings of Hinoda et al with those of Kim et al because such would improve the filtering ability of the device of Hinoda et al while lowering the number of components, allowing for ease of manufacture and lower cost of production. Hinoda et al does not disclose the use of an additional mesh optical filter positioned over the first mesh optical filter, but such would have been obvious to one of ordinary skill in the art as an obvious duplication of parts as such would increase the ability of the device to filter out radiation.

With respect to claim 22, Hinoda et al does not explicitly disclose apertures, but such would be obvious to one of ordinary skill in the art in order to give the metallic layers (36, 37) the ability to pass light through.

With respect to claim 23, the modified Hinoda et al discloses the vacuum evaporation as a method for depositing the metal layer.

With respect to claim 24, the metal layers are not disclosed to have the thicknesses claimed, but such would have been obvious to one of ordinary skill in the art in order to give the metal layers the transmissivity possible to allow a certain wavelength to pass through.

With respect to claim 25, the modified Hinoda et al disclose the metal layer to be made of silver or aluminum (see column 3, lines 26-27).

With respect to claim 26, Hinoda et al disclose a color sensing device comprising: substrate (1) as a semiconductor substrate (see column 3, lines 2-4); photodiodes (11, 12) as a photoconversion device formed within the substrate (1); dielectric layer (35) formed over photoconversion device (11, 12); and interference filters (31-34) comprising metal films (36-37) as a mesh optical filter positioned over the photoconversion device for passing light of a specific wavelength to photoconversion device (11, 12). Hinoda et al disclose the thicknesses of metal films (36-37) as controlling the transmission of a specific wavelength (see column 4, lines 26-38). Applicant argues in the response that use of colored filters (42-44) distinguishes Hinoda et al from the mesh optical filter claimed. However, the claim does not expressly exclude any use of colored filters, so it will be interpreted that applicant is basing the distinction from the device of Hinoda et al on the fact that Hinoda et al passes a range of wavelengths and not a specific singular wavelength. In that sense, Kim et al disclose such through the use of an optical transmission apparatus comprising a metal film (10, 104, 120) with apertures (12, 106, 124) for passing a particular wavelength of interest (see column 3, lines 17-30). Such would comprise the mesh optical filter positioned

over the device for passing a specific wavelength of light. It would be obvious to one of ordinary skill in the art to modify the teachings of Hinoda et al with those of Kim et al because such would improve the filtering ability of the device of Hinoda et al while lowering the number of components, allowing for ease of manufacture and lower cost of production. Hinoda et al does not disclose the use of an additional mesh optical filter positioned over the first mesh optical filter, but such would have been obvious to one of ordinary skill in the art as an obvious duplication of parts as such would increase the ability of the device to filter out radiation.

With respect to claim 27, the modified Hinoda et al disclose the transmission band of 440, 445 nm, which would fall in the passage of blue light.

With respect to claim 28, the modified Hinoda et al does not disclose the wavelength transmitted to be in the cyan, magenta, or yellow light region, but such would have been obvious to one of ordinary skill in the art because such would allow for imaging with that specific wavelength.

With respect to claim 29, the use of a Bayer pattern is not explicitly disclosed, but such would have been obvious to one of ordinary skill in the art because such would allow for randomization of different color filters.

With respect to claim 30, the modified Hinoda et al disclose the filter made of silver or aluminum (see column 3, lines 26-27).

With respect to claims 31 & 34, the modified Hinoda et al discloses the vacuum evaporation as a method for depositing the metal layer.

With respect to claims 32-33, the metal layers are not disclosed to have the thicknesses claimed, but such would have been obvious to one of ordinary skill in the art in order to give the metal layers the transmissivity possible to allow a certain wavelength to pass through.

With respect to claims 35-36, the modified Hinoda et al does not explicitly state the use of a CMOS or CCD image sensor, but such would have been obvious to one of ordinary skill in the art because of the ability to capture images accurately while providing for low manufacturing cost.

With respect to claim 37, the modified Hinoda et al does not explicitly disclose apertures, but such would be obvious to one of ordinary skill in the art in order to give the metallic layers (36, 37) the ability to pass light through.

With respect to claim 38, the modified Hinoda et al illustrate apertures (12, 106, 124) to be circular.

With respect to claims 39-44, the modified Hinoda et al does not explicitly disclose the apertures as such, but such would have been obvious to one of ordinary skill in the art because such would allow for a specific transmissivity of light.

With respect to claim 45, Hinoda et al disclose a color sensing device comprising: substrate (1) as a semiconductor substrate (see column 3, lines 2-4); photodiodes (11, 12) as a photoconversion device formed within the substrate (1); dielectric layer (35) formed over photoconversion device (11, 12); and interference filters (31-34) comprising metal films (36-37) as a mesh optical filter positioned over the photoconversion device for passing light of a specific wavelength to photoconversion

device (11, 12). Hinoda et al disclose the thicknesses of metal films (36-37) as controlling the transmission of a specific wavelength (see column 4, lines 26-38). Applicant argues in the response that use of colored filters (42-44) distinguishes Hinoda et al from the mesh optical filter claimed. However, the claim does not expressly exclude any use of colored filters, so it will be interpreted that applicant is basing the distinction from the device of Hinoda et al on the fact that Hinoda et al passes a range of wavelengths and not a specific singular wavelength. In that sense, Kim et al disclose such through the use of an optical transmission apparatus comprising a metal film (10, 104, 120) with apertures (12, 106, 124) for passing a particular wavelength of interest (see column 3, lines 17-30). Such would comprise the mesh optical filter positioned over the device for passing a specific wavelength of light. It would be obvious to one of ordinary skill in the art to modify the teachings of Hinoda et al with those of Kim et al because such would improve the filtering ability of the device of Hinoda et al while lowering the number of components, allowing for ease of manufacture and lower cost of production. Hinoda et al does not disclose the use of an additional mesh optical filter positioned over the first mesh optical filter, but such would have been obvious to one of ordinary skill in the art as an obvious duplication of parts as such would increase the ability of the device to filter out radiation.

With respect to claim 46, the modified Hinoda et al disclose the transmission band of 440, 445 nm, which would fall in the passage of blue light.

With respect to claim 47, the modified Hinoda et al does not disclose the wavelength transmitted to be in the cyan, magenta, or yellow light region, but such

would have been obvious to one of ordinary skill in the art because such would allow for imaging with that specific wavelength.

With respect to claim 48, the use of a Bayer pattern is not explicitly disclosed, but such would have been obvious to one of ordinary skill in the art because such would allow for randomization of different color filters.

With respect to claim 49, the modified Hinoda et al disclose the filter made of silver or aluminum (see column 3, lines 26-27).

With respect to claims 50 & 53, the modified Hinoda et al discloses the vacuum evaporation as a method for depositing the metal layer.

With respect to claims 51-52, the metal layers are not disclosed to have the thicknesses claimed, but such would have been obvious to one of ordinary skill in the art in order to give the metal layers the transmissivity possible to allow a certain wavelength to pass through.

With respect to claims 54-55, the modified Hinoda et al does not explicitly state the use of a CMOS or CCD image sensor, but such would have been obvious to one of ordinary skill in the art because of the ability to capture images accurately while providing for low manufacturing cost.

With respect to claim 56, the modified Hinoda et al illustrates the use of apertures (12, 106, 124).

With respect to claim 57, the modified Hinoda et al illustrates apertures (12, 106, 124) to be circular.

With respect to claims 58-63, the modified Hinoda et al does not explicitly disclose the apertures as such, but such would have been obvious to one of ordinary skill in the art because such would allow for a specific transmissivity of light.

With respect to claim 64, Hinoda et al disclose a color sensing device comprising: substrate (1) as a semiconductor substrate (see column 3, lines 2-4); photodiodes (11, 12) as a photoconversion device formed within the substrate (1); dielectric layer (35) formed over photoconversion device (11, 12); and interference filters (31-34) comprising metal films (36-37) as a mesh optical filter positioned over the photoconversion device for passing light of a specific wavelength to photoconversion device (11, 12). Hinoda et al disclose the thicknesses of metal films (36-37) as controlling the transmission of a specific wavelength (see column 4, lines 26-38). Applicant argues in the response that use of colored filters (42-44) distinguishes Hinoda et al from the mesh optical filter claimed. However, the claim does not expressly exclude any use of colored filters, so it will be interpreted that applicant is basing the distinction from the device of Hinoda et al on the fact that Hinoda et al passes a range of wavelengths and not a specific singular wavelength. In that sense, Kim et al disclose such through the use of an optical transmission apparatus comprising a metal film (10, 104, 120) with apertures (12, 106, 124) for passing a particular wavelength of interest (see column 3, lines 17-30). Such would comprise the mesh optical filter positioned over the device for passing a specific wavelength of light. It would be obvious to one of ordinary skill in the art to modify the teachings of Hinoda et al with those of Kim et al because such would improve the filtering ability of the device of Hinoda et al while

lowering the number of components, allowing for ease of manufacture and lower cost of production.

With respect to claim 65, the modified Hinoda et al illustrates the use of apertures (12, 106, 124).

With respect to claim 66, the modified Hinoda et al illustrate the use of metal layer over substrate.

With respect to claims 67-68, the metal layers are not disclosed to have the thicknesses claimed, but such would have been obvious to one of ordinary skill in the art in order to give the metal layers the transmissivity possible to allow a certain wavelength to pass through.

With respect to claim 69, the modified Hinoda et al disclose the filter made of silver or aluminum (see column 3, lines 26-27).

With respect to claim 70, the modified Hinoda et al illustrates apertures (12, 106, 124) to be circular.

With respect to claims 71-77, the modified Hinoda et al does not explicitly disclose the apertures as such, but such would have been obvious to one of ordinary skill in the art because such would allow for a specific transmissivity of light.

With respect to claim 78, Hinoda et al disclose a color sensing device comprising: substrate (1) as a semiconductor substrate (see column 3, lines 2-4); photodiodes (11, 12) as a photoconversion device formed within the substrate (1); dielectric layer (35) formed over photoconversion device (11, 12); and interference filters (31-34) comprising metal films (36-37) as a mesh optical filter positioned over the

photoconversion device for passing light of a specific wavelength to photoconversion device (11, 12). Hinoda et al disclose the thicknesses of metal films (36-37) as controlling the transmission of a specific wavelength (see column 4, lines 26-38). Applicant argues in the response that use of colored filters (42-44) distinguishes Hinoda et al from the mesh optical filter claimed. However, the claim does not expressly exclude any use of colored filters, so it will be interpreted that applicant is basing the distinction from the device of Hinoda et al on the fact that Hinoda et al passes a range of wavelengths and not a specific singular wavelength. In that sense, Kim et al disclose such through the use of an optical transmission apparatus comprising a metal film (10, 104, 120) with apertures (12, 106, 124) for passing a particular wavelength of interest (see column 3, lines 17-30). Such would comprise the mesh optical filter positioned over the device for passing a specific wavelength of light. It would be obvious to one of ordinary skill in the art to modify the teachings of Hinoda et al with those of Kim et al because such would improve the filtering ability of the device of Hinoda et al while lowering the number of components, allowing for ease of manufacture and lower cost of production. Hinoda et al does not disclose the use of an additional mesh optical filter positioned over the first mesh optical filter, but such would have been obvious to one of ordinary skill in the art as an obvious duplication of parts as such would increase the ability of the device to filter out radiation.

With respect to claim 79, the modified Hinoda et al disclose the transmission band of 440, 445 nm, which would fall in the passage of blue light.

With respect to claim 80, the modified Hinoda et al does not disclose the wavelength transmitted to be in the cyan, magenta, or yellow light region, but such would have been obvious to one of ordinary skill in the art because such would allow for imaging with that specific wavelength.

With respect to claim 81, the use of a Bayer pattern is not explicitly disclosed, but such would have been obvious to one of ordinary skill in the art because such would allow for randomization of different color filters.

With respect to claim 82, Hinoda et al disclose a color sensing device comprising: substrate (1) as a semiconductor substrate (see column 3, lines 2-4); photodiodes (11, 12) as a photoconversion device formed within the substrate (1); dielectric layer (35) formed over photoconversion device (11, 12); and interference filters (31-34) comprising metal films (36-37) as a mesh optical filter positioned over the photoconversion device for passing light of a specific wavelength to photoconversion device (11, 12). Hinoda et al disclose the thicknesses of metal films (36-37) as controlling the transmission of a specific wavelength (see column 4, lines 26-38). Applicant argues in the response that use of colored filters (42-44) distinguishes Hinoda et al from the mesh optical filter claimed. However, the claim does not expressly exclude any use of colored filters, so it will be interpreted that applicant is basing the distinction from the device of Hinoda et al on the fact that Hinoda et al passes a range of wavelengths and not a specific singular wavelength. In that sense, Kim et al disclose such through the use of an optical transmission apparatus comprising a metal film (10, 104, 120) with apertures (12, 106, 124) for passing a particular wavelength of interest

(see column 3, lines 17-30). Such would comprise the mesh optical filter positioned over the device for passing a specific wavelength of light. It would be obvious to one of ordinary skill in the art to modify the teachings of Hinoda et al with those of Kim et al because such would improve the filtering ability of the device of Hinoda et al while lowering the number of components, allowing for ease of manufacture and lower cost of production.

With respect to claim 83, the modified Hinoda et al disclose the use of apertures (12, 106, 124).

With respect to claim 84, the metal film (10) is disclosed to be a metal layer deposited and patterned to interconnect image sensor circuitry.

With respect to claims 85-86, the metal layers are not disclosed to have the thicknesses claimed, but such would have been obvious to one of ordinary skill in the art in order to give the metal layers the transmissivity possible to allow a certain wavelength to pass through.

With respect to claim 87, the modified Hinoda et al illustrates apertures (12, 106, 124) to be circular.

With respect to claims 88-89, the modified Hinoda et al does not explicitly disclose the apertures as such, but such would have been obvious to one of ordinary skill in the art because such would allow for a specific transmissivity of light.

With respect to claim 90, Hinoda et al disclose a color sensing device comprising: substrate (1) as a semiconductor substrate (see column 3, lines 2-4); photodiodes (11, 12) as a photoconversion device formed within the substrate (1);

dielectric layer (35) formed over photoconversion device (11, 12); and interference filters (31-34) comprising metal films (36-37) as a mesh optical filter positioned over the photoconversion device for passing light of a specific wavelength to photoconversion device (11, 12). Hinoda et al disclose the thicknesses of metal films (36-37) as controlling the transmission of a specific wavelength (see column 4, lines 26-38). Applicant argues in the response that use of colored filters (42-44) distinguishes Hinoda et al from the mesh optical filter claimed. However, the claim does not expressly exclude any use of colored filters, so it will be interpreted that applicant is basing the distinction from the device of Hinoda et al on the fact that Hinoda et al passes a range of wavelengths and not a specific singular wavelength. In that sense, Kim et al disclose such through the use of an optical transmission apparatus comprising a metal film (10, 104, 120) with apertures (12, 106, 124) for passing a particular wavelength of interest (see column 3, lines 17-30). Such would comprise the mesh optical filter positioned over the device for passing a specific wavelength of light. It would be obvious to one of ordinary skill in the art to modify the teachings of Hinoda et al with those of Kim et al because such would improve the filtering ability of the device of Hinoda et al while lowering the number of components, allowing for ease of manufacture and lower cost of production.

With respect to claim 91, the metal film (10) is disclosed to be a metal layer deposited and patterned to interconnect image sensor circuitry.

With respect to claim 92, the metal layers are not disclosed to have the thicknesses claimed, but such would have been obvious to one of ordinary skill in the

art in order to give the metal layers the transmissivity possible to allow a certain wavelength to pass through.

With respect to claim 93, the modified Hinoda et al disclose the metal layer to be made of silver or aluminum (see column 3, lines 26-27).

Response to Arguments

4. Applicant's arguments filed 9/14/2006 have been fully considered but they are not persuasive.

The thrust of applicant's argument appears to be the fact that the prior art does not disclose mesh filters similar to those of the applicant. However, applicant does not make any distinction with respect to claims 1, 21, 26, 45, 64, and 78. These claims do not refer to the "number, size, and arrange of the apertures of the mesh filter to select the light to be filtered" as applicant discloses on page 15 of the response filed September 14, 2006. Applicant also attempts to read the teachings of Hinoda et al to limit to specifically a solid filter. However, neither the abstract nor column 4, lines 1-30 of Hinoda et al to which the applicant refers limits the filter device to specifically solid filters. As a result, applicant's arguments are not persuasive and the previous rejection is sustained.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The prior art that the applicant has cited on the most recently filed IDS, US 5,973,316 to Ebbesen et al discloses a device comprising: metallic film (10, 71) with

apertures (12, 74) that filters light of a predetermined wavelength (see abstract) as a mesh optical filter positioned over detector (78) as a photoconversion device. While the substrate and dielectric layer is not explicitly disclosed, such are not the critical inventive elements and are instead supplementary items.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick J. Lee whose telephone number is (571) 272-2440. The examiner can normally be reached on Monday through Friday, 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Patrick J. Lee
Examiner
Art Unit 2878

PJL
October 3, 2006

Stephone B. Allen
Primary Examiner